# California Regional Water Quality Control Board North Coast Region

#### MONITORING AND REPORTING PROGRAM NO. R1-2006-0085

FOR

# KLAMATH RANCH RESORT AND BLUE HERON RV PARK WASTEWATER TREATMENT FACILITY

Siskiyou County

California Water Code sections 13267 and 13383 authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This monitoring and reporting program establishes monitoring and reporting requirements, which implement the state regulations. Any person failing to furnish technical or monitoring reports or falsifying any information therein is guilty of a misdemeanor, and may be subject to civil liability. (Wat. Code, § 13268.)

#### **FLOW MEASUREMENT**

The total discharge flow to the subsurface drip irrigation system shall be determined daily through flow measurement or calculation when discharging to the irrigation field, and reported in the quarterly monitoring report. When circumstances require use of the shallow sand trench system, the total daily flow to that system shall be determined for the duration of the discharge and shall be reported in the quarterly monitoring report. All flow measurement devices shall be tested annually and their accuracy certified. Certification shall be submitted with the annual monitoring report.

## **EFFLUENT MONITORING**

Monitoring samples of treated effluent shall be collected and analyzed when there is discharge to the subsurface drip disposal field during a calendar quarter, in accordance with Table 1. The sampling location for effluent samples shall be a point after completion of treatment and disinfection and prior to discharge to the irrigation field.

Table 1. Effluent Monitoring for AdvanTex Units

Constituent	Units	Type of Sample	Sample Frequency	Reporting Frequency
BOD (20°C, 5-day)	mg/l	Grab	Quarterly	Quarterly
Total Coliform	MPN/100 ml	Grab	Quarterly	Quarterly
Bacteria				
Total Nitrogen	mg/l	Grab	Quarterly	Quarterly

#### **SEPTIC TANK MONITORING**

The Discharger shall make surface inspections of all septic tanks not less than monthly to record any odors, evidence of surfacing effluent, or other signs of malfunction. Septic tanks shall be inspected and pumped as needed. In addition, the Discharger shall collect samples of the effluent from the Blue Heron RV septic tank in accordance with Table 2. Samples of the septic tank effluent samples shall be collected from an accessible location after exiting the septic tank and prior to the recirculation tank.

 Table 2. Effluent Monitoring for RV Park Septic Tank

Constituent	Units	Type of Sample	Sample Frequency	Reporting Frequency
Formaldehyde	mg/l	Grab	Annually	Annually
Total Phenol	mg/l	Grab	Annually	Annually
Total Nitrogen <sup>1,2</sup>	mg/l	Grab	Quarterly	Quarterly
Nitrate Nitrogen <sup>1</sup>	mg/l (as N)	Grab	Quarterly	Quarterly
Flow <sup>1</sup>	gpd	Continuous	Daily	Quarterly

#### **DISPOSAL AREA MONITORING**

At least 90 days prior to using the subsurface drip disposal fields, the Discharger shall submit a report describing and certifying that a wastewater disinfection system has been constructed, is capable of meeting effluent limits prescribed by this Order, and is fully operational.

Monitoring of all subsurface disposal areas shall be conducted when the disposal areas are used, and the results shall be included in the quarterly monitoring report. Evidence of erosion, saturation, seepage, surfacing effluent, the presence of nuisance conditions, or other signs of malfunction or improper operation shall be noted in the report. The quarterly monitoring report shall include the daily volume and application rate of treated wastewater discharge to the disposal field and any observations indicating non-compliance with provisions of waste discharge requirements. Monitoring of the disposal areas shall include the following:

<sup>&</sup>lt;sup>1</sup> Additional monitoring of the Blue Heron RV Park septic tank effluent for Total Nitrogen, Nitrate Nitrogen, and flow is required only when all or a portion of the flow from the Blue Heron RV Park has been diverted from the centralized wastewater system to the Blue Heron RV Park leachfield.

<sup>&</sup>lt;sup>2</sup> Total Nitrogen is the sum of organic nitrogen, ammonia, nitrite, and nitrate.

**Table 3. Disposal Area Monitoring** 

Constituent	Units	Type of Sample	Sample Frequency	Reporting Frequency
Flow	Gallons	Continuous	Daily	Quarterly
Rainfall	Inches	Observation	Daily	Quarterly
Water Application Rate	gal/acre/day	Calculated	Daily	Quarterly

#### **GROUNDWATER MONITORING**

The purpose of groundwater monitoring is to determine compliance with quality objectives for groundwater in the vicinity of the subsurface drip irrigation area and the Blue Heron RV Park leachfield when there is a discharge to the RV Park leachfield. The groundwater monitoring shall be as follows

## 1. Monitoring Locations

The Discharger shall submit a groundwater well installation workplan for characterization of groundwater quality at the disposal fields. The workplan shall describe the installation of sufficient monitoring wells to allow evaluation of the groundwater quality upgradient and down gradient of the subsurface drip disposal areas. Every monitoring well shall be constructed to yield representative samples from the groundwater downgradient of the disposal field and to comply with applicable well standards. Additional monitoring wells constructed at the site shall be added to the monitoring network as needed. Samples shall be collected from all installed wells for the constituents specified in Table 4.

# 2. Monitoring Schedule

Ground water samples shall be collected from monitoring wells on a quarterly basis when discharging to the subsurface drip irrigation areas and, when flow has been diverted to the Blue Heron RV Park leachfield, the groundwater well(s) downgradient of the Blue Heron RV Park leachfield. Groundwater samples shall be analyzed for the following constituents:

 Table 4. Groundwater Monitoring Constituents

Constituent	Units	Type of Sample	Frequency
Total Dissolved Solids	mg/l	Grab	Quarterly
Ammonia Nitrogen	mg/l	Grab	Quarterly
Nitrate Nitrogen	mg/l (as N)	Grab	Quarterly

#### **SLUDGE MONITORING**

Prior to the removal of sludge from the any septic or treatment tank for the purpose of reuse or final disposal through land application, a composite sample shall be collected and tested for the following metals: Cadmium, Copper, Nickel, Chromium, Lead, and Zinc. The composite sample will be comprised of a sufficient number of discrete samples so as to be representative of the tank or storage pond. Sampling results shall be reported to the Regional Water Board.

#### QUARTERLY REPORT

The purpose of the report is to document treatment performance, effluent quality and compliance with waste discharge requirement. For each calendar quarter, a self-monitoring report shall be submitted to the Regional Water Board in accordance with the following:

1. The report shall be submitted by the first day of the second month following the end of the quarter, as follows:

Date

November 1<sup>st</sup>

February 1st

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Reporting Period	Monitoring Period	Report Due D	
1 <sup>st</sup> Quarter	January 1 – March 31	May 1 <sup>st</sup>	
2 <sup>nd</sup> Quarter	April 1 – June 30	August 1 <sup>st</sup>	

July 1 – September 30

October 1 – December 31

**Table 5. Monitoring Report Due Dates** 

- 2. Letter of Transmittal: Each report shall be submitted with a letter of transmittal. This letter shall include the following:
  - a. Identification of facility: Name, address, Order number, and WDID number;
  - b. Date of report and monitoring period;
  - c. Identification of all violations of effluent limitations or other discharge requirements found during the monitoring period;
  - d. Details of the violations: parameters, magnitude, test results, frequency, and dates;
  - e. The cause of the violation;

3<sup>rd</sup> Quarter

4<sup>th</sup> Quarter

- f. Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation;
- g. Other relevant information including, but limited to, incidents of wastewater treatment and collection system equipment failure, results of visual observations of the irrigation field, results of septic tank sludge depth measurements, reports describing the removal and disposal of septic tank solids, and reports of sanitary sewer overflows;
- h. Authorized signature and certification statement.

- 3. Compliance Evaluation Summary: Each report shall include a compliance evaluation summary. The summary shall illustrate clearly the facility's compliance with all waste discharge requirements, as required. During periods of no discharge, the reports shall certify no discharge.
- 4. Results of Analyses and Observations. Each report shall include the following:
  - Tabulations of all required analyses, including parameter, sample date and time, sample station, and test result;
  - b. Written summary of results of all visual monitoring conducted during the monitoring period that indicate non-compliance with provisions of waste discharge requirements;
  - c. If the Discharger monitors any pollutant at the point of compliance or conducted visual inspection more frequently than required by this Permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and report of the data submitted in the discharger monitoring report
- 5. Report Submittal: Copies of each monitoring report shall be mailed to:

North Coast Regional Water Quality Control Board 5550 Skylane Boulevard, Suite A Santa Rosa, CA 95403

#### ANNUAL REPORT

The Discharger shall submit an annual report to the Regional Water Board for each calendar year. The report shall be submitted so that it is received by the Regional Water Board by March 1st of the following year. The report shall include, at a minimum, the following:

- 1. Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal and reclamation records from the previous year; and
- 2. A comprehensive discussion of the facility's compliance with all effluent limitations and other waste discharge requirements, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Permit.

Ordered by:		
,	Catherine E. Kuhlman	
	Executive Officer	

November 29, 2006